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CORRES. CONTROL
LTR. NO.

Originator Ltr Log #
JEL-011-00

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DIST.	LTRENC
BODEY, ED	
CRAWFORD, A.C.	
HAUG, D. G.	
HUGHES, F.P.	
KASEN, J.	
LAW, J. E.	<input checked="" type="checkbox"/>
MILLS, STEVE	
SUTTON, S. R.	
TRICE, KELLY	
WHEELER, M.	
WOLF, K.	

Law, J. E.
 [Signature]
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RMRS (B116)	X
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CLASSIFICATION:	
UCNI	
UNCLASSIFIED	X
CONFIDENTIAL	
SECRET	

AUTHORIZED CLASSIFIER
SIGNATURE:

Date:

IN REPLY TO RF CC NO.:

ACTION ITEM STATUS:
 PARTIAL/OPEN
 CLOSED

LTR APPROVALS:

ORIG. & TYPIST INITIALS:
m



Rocky Mountain
Remediation Services, L.L.C.
... protecting the environment

Rocky Flats Environmental Technology Site
 08 Highway 93, Unit B
 Denver, Colorado 80403-8200
 Phone: (303) 966-7000

February 16, 2000

Alan D. Rodgers
 Division Manager, Waste & Remediation Operations
 Kaiser-Hill Company, L.L.C.
 Building 130

TRANSMITTAL OF "EVALUATION OF OU7 AERATION TREATMENT SYSTEM,
 NOVEMBER 1998 - OCTOBER 1999" - JEL-011-00

Attached please find the above referenced report that summarizes sampling information gathered from November 1998 to October 1999. Since November 1998, RMRS has been following the addendum (dated November 11, 1998) to the OU7 Passive Seep Interception and Treatment System Sampling and Analysis Plan (OU7 SAP).

The report supports the prescribed semi-annual sampling that is scheduled to replace the end of the monthly sampling events. In addition, a proposal to reduce some of the sampling parameters is included in the report. Please transmit this report to DOE/ RFFO and provide any written comments on the report that would affect the next revision of the OU7 SAP. The OU7 SAP will be revised and submitted to the agencies for comment before June 2000 when the first semi-annual sample will be taken.

Please direct questions to me at extension 4842 or Russ Cirillo at extension 5876.

[Signature]
 John E. Law, Vice President
 Project Management and Water Operations

RC:mln

Attachments:
 As Stated

cc:
 L. Butler - Kaiser-Hill

ADMIN RECCRD



V14

Date

Tim Rehder
EPA
999 18th Street
Suite 500
Denver, CO 80202

Draft

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Contact
Title

XXX:xxx

cc:

L. Butler - Kaiser-Hill
S. Hahn - Kaiser-Hill

Date

Carl Spreng
CDPH&E
4300 Cherry Creek Drive South
Denver, CO 80220-1530

Draft

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Contact
Title

XXX:xxx

cc:

L. Butler - Kaiser-Hill
S. Hahn - Kaiser-Hill

Date

Norma Castaneda
DOE, RFFO
Building 460

Draft

**TRANSMITTAL OF "EVALUATION OF OU7 AERATION TREATMENT SYSTEM,
NOVEMBER 1998 – OCTOBER 1999"**

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Contact

Title

XXX:xxx

cc:

L. Butler - Kaiser-Hill
S. Hahn - Kaiser-Hill



000111187

**INTEROFFICE
MEMORANDUM**

ZC210

DATE: February 22, 2000
TO: Distribution
FROM: *Jmc* J. R. Cirillo, Water Operations, Bldg. T891B, X5876
SUBJECT: Review and Comment Revised Procedure
RMRS/OPS-PRO-CWTF.172, Revision C -- JRC-004-00
ACTION: Review and Comment by March 2, 2000

The subject document (attached) is transmitted for your review and comment.

Please review and provide any comments on the attached form(s) by March 2, 2000. Comments received after this date will be considered in the next revision of the document. If you do not respond to the review, the process will consider that you have concurred with the document's content and have no comments. Please consider the distinction between "general" and "mandatory" comments, as depicted on the Review and Comment Form. Mandatory comments should be reserved for instances where your comment highlights a departure from a regulation, requirement, etc.

I extend my appreciation in advance for your participation in the review, and if clarification or specific information is needed, please contact me at the extension provided above.

mcb

Attachments:
As Stated

Distribution:
K. M. Kelly, RTG, (T891C)
J. H. Moore, RMRS, (T893B)
B. Olson, RTG, (B891)
P. L. Snyder, RTG, (T891P)
J. Titus, RMRS, (B881)

cc:
F. M. Huffman (B995) w/o Attach.



REVIEW COMMENT SHEET

Please review the attached procedure: RMRS/OPS-PRO-CWTF.172 DRAFT C 2/22/00 CWTF System Normal Operations Oil Absorbent Media Drum Unit
 Number _____ Date _____ Title _____

Comment Due Date: 03/2/00

Internal Review _____ Parallel Review _____ Verification _____ Validation _____ Revalidation _____
 QA _____ Peer _____

General (G) comments require resolution but do not require resolution acceptance. Mandatory (M) comments require resolution and resolution acceptance.
 1-88000-PP-004 provides complete definitions of General and Mandatory comments.

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INIT/DATE

POC/Reviewer: (Comments not signed by Reviewer/POC will be considered unofficial and not subject to resolution)

- No Comments
- This procedure revision has no impact or relevance to our discipline or organization and we waive need to concur. We acknowledge this concurrence waiver does not affect our responsibility to implement the requirements of this procedure when needed.

Name _____ Signature _____

Ext./Pager/Fax _____ Bldg./Dept. _____ Date _____

Return to:

4046 Mark Burmeister pager 212-6228 5891 T893B
 FAX Name Ext. Location

If questions on content, please call the SME:

 Name Russ Cirillo
 Ext. 5876
 Ext.

REVIEW COMMENT SHEET (continued)

Page of

Review comments for document: CWTF. System Normal Operations Oil Absorbent Media Drum Unit 2/22/00
RMRS/OPS-PRO-CWTF.172 DRAFT Revision C

ITEM G or M	PAGE	SECTION OR STEP	COMMENT	RESOLUTION	Resolution accepted INITIAL/DATE

POC/Reviewer: (Comments not signed by the Reviewer/POC will be considered as unofficial comments)

Name _____ Signature _____ Date _____
 Initials _____ Date _____
 Resolutions Accepted



Rocky Mountain
Remediation Services, LLC
... protecting the environment

PROCEDURE

CONSOLIDATED WATER TREATMENT FACILITY
SYSTEM NORMAL OPERATIONS OIL-ABSORBENT
MEDIA DRUM UNIT

RMRS/OPS-PRO-CWTF.172
DRAFT Revision C
Effective Date: Feb. 22, 2000

APPROVED: _____

J. R. Cirillo, Facility Manager

Page 1 of 7

USE Category 3

1.0 PURPOSE

This procedure provides operating instructions for the Oil-Absorbent Media Vessel Unit which is a skid-mounted unit used to pre-treat water contaminated with oil and grease as the contaminated water is unloaded from a tanker truck to the Consolidated Water Treatment Facility (CWTF) Influent Storage Tanks (T-200, T-201, or T-202).

2.0 SCOPE

This procedure applies to all personnel involved in the operation of the CWTF.

This procedure addresses normal operations of the Oil-Absorbent Media Vessel Unit.

This document supersedes, *System Normal Operations Oil-Absorbent Media Drum Unit Consolidated Water Treatment Facility, 4-S72-ENV-OPS-FO.46.*

3.0 OVERVIEW

The Oil-Absorbent Media Vessel Unit may be used to pre-treat oily wastewater being off-loaded from a tanker truck at the CWTF prior to routing the water to one of the Influent Tanks. The unit is a mobile, skid-mounted unit, may be moved by fork-lift.

The vessel is filled with 5.5 ft³ of oil-absorbent media and per the product information sheet the media will absorb up to 60% of its weight in oil and grease. The vessel is designed for a maximum flow rate of 12 gallons per minute (gpm) when using Clarion PM 100 Absorbent. As the media absorbs oil the pressure drop across the media increases.

4.0 LIMITATIONS AND PRECAUTIONS

- The Maximum Administrative Operating Pressure of the Oil-Absorbent Media Vessel is 30 psi.

- The Maximum Operating Flow Rate for the Oil-Absorbent Media Vessel is 12 gpm.
- Follow the requirements of the Radiation Work Permit (if required).
- The CWTF Health and Safety Plan (HASP) identifies hazards associated with operation of the CWTF and delineates control measures necessary to minimize the risk to personnel from these hazards.

5.0 PREREQUISITES

5.1 Planning and Coordination

CWTF Responsible Manager

- [1] Ensure that activities are listed on the Plan of the Day (POD).
- [2] Discuss with the Operator(s) the influent characteristics of the water to be processed.

Lead Operator/Operator

- [1] Attend a safety briefing covering plant operations prior to the initiation of this procedure.
- [2] Complete Appendix 6, "CWTF Influent Water Assessment Worksheet", and Appendix 7, "CWTF Influent Water Receiving Checklist" of *Consolidated Water Treatment Facility, Influent Collection, Transfer and Storage Operations*, RMRS/OPS-PRO.149.
- [3] Ensure there is adequate capacity to accept the water to be transferred from the tanker truck.
- [4] Stage the Unit at the end of the Building 891 truck dock (west end) prior to the arrival of the tanker.

Health and Safety Specialist/Designee

- [1] Conduct a safety briefing covering plant operations prior to the initiation of this procedure.
- [2] Ensure that personnel are aware of the hazards associated with performing the actions delineated in this procedure. Ensure that personnel have been briefed on the requirements of the Facility HASP and are capable of effectively implementing prescribed hazard controls.

6.0 INSTRUCTIONS

6.1 Oil-Absorbent Media Vessel Unit Operation

Operator

- [1] Verify that the tanker truck wheels are chocked.
- [2] Inspect all transfer hoses and ensure that they are in good working condition.
- [3] Connect the transfer hose from the tanker truck to the suction side of the centrifugal pump on the Oil-Absorbent Media Unit.
- [4] Connect the transfer hose from the discharge side of the media vessel to the truck dock influent camlock labeled "INFLUENT TO TANKS 200, 201 OR 202"

NOTE 1 *The following steps [5] through [12] may be performed in any sequence.*

- [5] OPEN manual valve V-103, Truck Dock Influent, located inside Building 891.
- [6] OPEN the Media Vessel influent 1-inch ball valve.
- [7] OPEN the Media Vessel effluent 2-inch ball valve.
- [8] Ensure all other valves on the Oil-Absorbent Media Unit skid are CLOSED.
- [9] Ensure the tanker truck is properly vented.
- [10] OPEN the discharge valve on the tanker.
- [11] OPEN the appropriate Influent Tank manual inlet valve as follows:
 - For transfer of water to T-200, OPEN HVA-200 (influent valve to T-200), ensure that manual valves HVA -201 and HVA-202 are CLOSED.
 - For transfer of water to T-201, OPEN HVA-201 (influent valve to T-201), ensure that manual valves HVA -200 and HVA-202 are CLOSED.
 - For transfer of water to T-202, OPEN HVA-202 (influent valve to T-202), ensure that manual valves HVA -200 and HVA-201 are CLOSED.
- [12] Plug the centrifugal pump into the 220 volt receptacle located in the truck dock.
- [13] Turn the local 220 volt receptacle switch on, and begin the transfer of water from the tanker truck to the appropriate influent storage tank.

- [14] Adjust the 1" influent ball valve on the skid to ensure that approximately 8 gpm of water is being routed to the vessel. The flow may be monitored using the flow meter on the skid.

NOTE 2 *The maximum flow rate for the unit is 12 gpm. The minimum flow rate for the centrifugal pump is 0.5 gpm.*

- [15] Monitor the Oil-Absorbent Media Vessel Unit immediately after start-up, 1/2 hour after start-up, 1 hour after start-up, and each hour thereafter, and record readings on the Oil-Absorbent Media Vessel Log Sheet (Appendix 1).
- [16] Adjust the flow rate to the Vessel as necessary to balance flow rate versus pressure drop. The following table illustrates the expected pressure drops at various operating flow rates for the current media (Clarion PM-100):

Table 1: Aquatec PC-24 Vessel filled with Clarion PM-100 Absorbent

Flow Rate (gpm)	Superficial Flow Velocity (gpm/ft ²)	Contact Time in vessel (minutes)	Fresh Media Inlet Pressure (1.75 ft) (psi)	Spent Media Inlet Pressure (1.75 ft) (psi)
6	1.91	6.9	1.3	14.6
7	2.23	5.9	1.5	18.1
8	2.55	5.1	1.7	19.8
9	2.87	4.6	2.0	24.1
10	3.18	4.1	2.1	25.8
11	3.50	3.7	2.6	29.2
12 (max)	3.82	3.4	2.8	30

The increase in the pressure drop across the clay media as oil is absorbed will be monitored and recorded (refer to Appendix 1). When the media is spent (as determined by the pressure drop at a particular operating flow rate in Table 1), the media should be replaced.

NOTE 3 *The pressure will increase as the absorbent media absorbs oil, which may in turn decrease the pump flow rate.*

- [17] The pump is not equipped with an automatic shut-off, therefore it is necessary to closely monitor the water transfer. An operator should be in attendance during the last 15 minutes of the water transfer to turn the pump off when the tanker is empty.
- [18] WHEN the pump begins to cavitate or flow meter indicates no flow (which indicates that the tanker is empty), THEN shut the local receptacle switch to OFF.

- [19] WHEN the tanker is empty and after the local receptacle switch has been shut OFF THEN CLOSE the following (the following valves may be CLOSED in any sequence);
- Tanker discharge valve
 - Tanker manway/vent
 - Oil-Absorbent Media Vessel Unit 1" inlet ball valve
 - Oil-Absorbent Media Vessel Unit 2" effluent ball valve
 - Manual valve V-103
- [20] Disconnect the transfer hoses, and catch any water that drains from the transfer hoses into a bucket.
- [21] Transfer any collected water into the appropriate Influent tank via the Building 891 sump. Reference *Consolidated Water Treatment Facility, Influent Collection, Transfer and Storage Operations*, RMRS/OPS-PRO.149.

7.0 RECORDS

The following documents are initiated, processed or maintained during the performance of this procedure and **SHALL** be controlled as follows:

Record Identification	Record Type Determination	Protection / Storage Methods	Processing Instructions
<ul style="list-style-type: none"> • CWTF Operations Log Book • Oil Absorbent Media Vessel Log Sheet (Appendix 1) • CWTF Influent Water Assessment Worksheet • CWTF Influent Water Receiving Checklist • Qualification/Training Documentation, as required • Occurrence Reports, as required 	<p><i>In-Process</i> <i>Quality</i> <i>Assurance</i> <i>Records</i></p>	<p>Responsible Manager shall implement reasonable level of protection to prevent loss and/or degradation. Documents shall be protected utilizing standard office equipment and methods when not in use.</p>	<p>Continue prescribed processing of documents. Once approved by the Responsible Manager, transmit the document and DHF to RMRS Document Control Center in accordance with RMRS-DC-06.01 and RMRS-RM-06.02. Submission of record copies to the RMRS Records Center will satisfy Administrative Record requirements.</p>

8.0 REFERENCES

Rocky Flats Environmental Technology Site, Consolidated Water Treatment Facility (CWTF) Health and Safety Plan, Resource Technology Group, 1995

2-S47-ER-ADM-05.14, Use of Field Logbooks and Forms

RMRS-DC-06.01, Document Control Program

RMRS-RM-06.02, Records Identification, Generation and Transmittal

RMRS/OPS-PRO.149, Consolidated Water Treatment Facility, Influent Collection, Transfer and Storage Operations

14/14